



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,054	11/27/2001	Sandra Patricia Merino	517427-2002	9716

20999 7590 04/13/2004  
FROMMER LAWRENCE & HAUG  
745 FIFTH AVENUE- 10TH FL.  
NEW YORK, NY 10151

EXAMINER

SORKIN, DAVID L

ART UNIT	PAPER NUMBER
----------	--------------

1723

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/995,054	MERINO ET AL.	
	Examiner	Art Unit	
	David L. Sorkin	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. This application contains claims 5 and 6 drawn to an invention nonelected with traverse in Paper No. 7. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.
2. It is noted that applicant failed to comply with 37 CFR 1.121(c) by not indicating that claims 5 and 6 are "(withdrawn)" in the amendment claim list. Any future amendment or proposed amendment must comply with 37 CFR 1.121.

### ***Drawings***

3. Receipt of replacement sheets filed 12 January 2004 is acknowledge, but the drawings as amended by these sheets are objected to for the following reasons:
  - a. The drawings contradict the specification. Page 34, lines 3-7 explicitly states that in Fig. 17 "theta-B equals 0.0106 radians"; however, applicant has amended Fig. 17 so as to contradict this statement by changing theta-B to "0.027 radians". Likewise, page 34, lines 9-12 explicitly states "theta-B equals 0.0899 radians"; however, applicant has amended Fig. 19 so as to contradict this statement by changing theta-B to "0.027 radians".
  - b. Volumes should be reported in units of volume, not units of area. In numerous instances volumes are given units of square inches rather than cubic inches.

### ***Specification***

4. On page 41, the fourth-to-last line, "10<sup>-4</sup>" apparently should read - - 10<sup>4</sup> - -.

Art Unit: 1723

5. The amendment filed 12 January 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is the series of equations contained on page 5 of the amendment document. These equations are completely unsupported by the original disclosure. Applicant is required to cancel the new matter in the reply to this Office Action.

6. The newly added portion of the specification filed 12 January 2004 is objected to. Specifically, on page 5 of the amendment document, the use of the word "trapeze" (four occurrences) apparently to mean 'right prism having a trapezoidal base', is objected to. More appropriate language should be used. Of course, if applicant provides evidence that the word "trapeze" has been used in an appropriate manner, this objection will be gladly withdrawn.

#### ***Claim Objections***

7. Claim 7 is objected to under 37 CFR 1.75(d)(1). As amended, claim 7 recites "said apparatus comprising a rotor assembly, a rotor housing and one of a rotor core", whereas the specification states on page 20 "Rotor assembly 2 includes an outer rotor housing 5 and a core 6". The redundant recitation of the rotor assembly in claim 7 as if it were a third part distinct for the rotor housing and rotor core is objected to. Language conforming to the remainder of the specification is required. For example - - said apparatus comprising a rotor assembly including a rotor housing and a rotor core - - is suggested.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

10. Claim 13 recites "a rotor core *rotatable within* the rotor housing" (emphasis added). While the rotor assembly (2) of the invention, including both the housing and the core, is understood to be rotatable within "tank assembly (1)", rotation of the core (6) with respect to the rotor housing (5) is not enabled. Oppositely, Figs. 2A and 2B, would convey to one skilled in the art that the rotor housing (5) and core (6) are fixed relative to one another by pins, similar to "pins 23" of Gibson et al. (US 3,430,849). Without any explanation in the instant specification of how the core (6) is made to rotate freely with respect to the rotor housing (5), and considering the substantial problems, such as fluid agitation, that such a situation would cause, it must be considered that such a limitation is not enabled.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1723

12. Claims 9-12 and 14-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention”

- a. In claim 9, which depends from claim 7, it is unclear what is meant by “each rotor core”. Claim 7 only positively recites one rotor core.
- b. In claim 10, which depends from claim 7, it is unclear what is meant by “the number of fins of each rotor core”. Claim 7 positively only positively recites one rotor core and does not mention fins.
- c. Regarding claims 11 and 12, which depend from claim 10, after requiring spaced apart fins in parent claims 10, recitation of zero fins in claims 11 and 12 is very confusing.
- d. Regarding claims 16 and 17, which depend from claim 14, after requiring “a number of fins” in parent claim 14, recitation of zero fins in claims 16 and 17 is very confusing.
- e. Generally, it is unclear what is meant by “a number of fins”, recited in claims 9 and 14. One of ordinary skill in the art would not understand “a number of fins” to include situation involving no fins. It is unclear if applicant intends “a number of fins” to refer to one or more fins, two or more fins or some other meaning.

***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1723

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1-4, 7-12 and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Gibson et al. (US 3,430,849). Claim 1 Gibson ('849) disclose a centrifuge apparatus comprising a tank (2) and a rotor assembly (1,11,12,13,18,19). The claim does not positively recite any additional structural elements. The apparatus would be capable of being used in the manner discussed in claim 1. Col. 2, lines 65-69 of Gibson ('849) disclose interchanging rotor assemblies. Claims 2 and 3 merely discuss rotors which are not part of the claimed apparatus. Claim 4 requires "A centrifuge apparatus" but does not further require any other structural elements. Instead it stipulates that the centrifuge is "operable at certain predetermined parameters" and discusses what type of rotor one might choose to operate the centrifuge with during intended operations. Gibson ('849) discloses a centrifuge apparatus (see title). Various operational parameters are discussed in col. 5, lines 55-75. It is considered the discussion in the claim of what rotors the claimed apparatus is "usable with" does not distinguish the claimed apparatus from the prior art because no rotor is positively recited in the claim. Regarding claims 7 and 8, Gibson ('849) discloses a centrifuge apparatus for separating particles of a product (see col. 1, lines 28-34) having a rotor assembly (1,11,12,13,18,19) including a rotor housing (1) and a rotor core (11). As disclosed in col. 2 line 72 to col. 3 line 1 and Fig. 2, the rotor core (as well as other rotor assembly components) are threadedly assembled and therefore would be capable of being removed and replaced. Regarding claim 9, the rotor assembly includes a core (11) with a plurality of fins (16) arranged in a predetermined

Art Unit: 1723

manner (see Fig. 3). Regarding claim 10, a plurality of fins (16) are equidistantly spaced apart (see Fig. 3). Regarding claims 11 and 12, six fins (16) extend radially outwardly from a rotor core (11) (see col. 3, lines 26-30; Fig. 3). Note: while claim 13 is not rejected as anticipated by Gibson ('849) because Gibson ('849) does not disclose the limitation of claim 13 which is not enabled as discussed above with regard to section 112, first paragraph, it is noted for the record that Gibson ('839) otherwise discloses all the limitations of claim 13. Specifically, Gibson ('849) discloses a rotor assembly (1,11,12,13,18,19) rotatable in a centrifuge assembly (2) comprising a rotor housing (1,12,13,18,19) of a defined volume and a rotor core (11) including a plurality of product flow distribution channels (15) and a plurality of fins (16) extending radially therefrom of a predetermined configuration to define a volume of the predetermined rotor core (see Figs. 2 and 3). Regarding claim 14, Gibson ('849) discloses a rotor core (11) including a plurality of product flow distribution channels (15) and a plurality of fins extending radially therefrom of a predetermined configuration to define a predetermined volume of the rotor core (see Fig. 3). Regarding claim 15, the fins are equidistantly spaced apart from each other (see Fig. 3). Regarding claims 16 and 17, the number of fins is six (see col. 3, lines 26-30; Fig. 3).

### ***Response to Arguments***

15. Except with regard to claim 13, the rejections under the first paragraph of section 112 have been withdrawn. Applicant has not particularly discussed independent claim 13, which is rejected upon grounds different from those of any other of the claims.



Art Unit: 1723

16. Applicant's arguments with respect to section 102 are vague and tend to be directed to a non-elected process invention. No claim is specifically addressed. Applicant should at least address each independent claim rejected under section 102. Independent claims 1, 7 and 14 are reject under section 102. In no case does applicant point out an element or arrangement of elements of the claimed structure which the applied reference lacks.

### ***Conclusion***

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 571-272-1148. The examiner can normally be reached on 9:00 -5:30 Mon.-Fri..

Art Unit: 1723

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Sorkin

David L. Sorkin  
Examiner  
Art Unit 1723